

## THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Applicant** 

: Carlo Waldfried et al.

Serial No.

: 10/623,729

Filed

: July 21, 2003

Title

: ULTRAVIOLET CURING PROCESSES FOR ADVANCED LOW-K

**MATERIALS** 

Docket

: AXC 0003 I2/40970.21/01-SM5-228 CIP2

Art Unit

: 1762

Confirm No. : 6075

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-

P.O. Box 1450

Alexandria, VA 22313-1450

Commissioner for Patents

Sir:

## INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97, AND 1.98

Applicants submit herewith patents, publications, and other information of which they are aware, which they believe may be material, as defined in 37 CFR §1.56(b), to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR \$1.56(a). While the information referred to in this Information Disclosure Statement may be material pursuant to 37 CFR \$1.56(b), the filing of this Information Disclosure Statement is not intended to, pursuant to 37 CFR \$1.97(h), constitute an admission that any patent, publication, or other information referred to is, or is considered to be, material to the patentability of this invention. Further, pursuant to 37 CFR \$1.97(g), the filing of this Statement should not be construed as a statement that a search has been made or that no other material information exists.

This Information Disclosure Statement is being filed within the period set forth in 37 CFR §1.97(b) because it is believed to be filed before the mailing date of a first office action on the merits.

Serial No. 10/623,729

Docket No. AXC 0003 I2/40970.21/01-SM5-228 CIP2

The Office has waived the requirement pursuant to 37 CFR 1.98 (a)(2)(i) for submitting a copy of each cited U.S. patent and each U.S. patent application publication for all U.S. national patent applications filed after June 30, 2003 and for all international applications that have entered the national stage under 35 USC § 371 after June 30, 2003. Therefore, no copies of each cited U.S. patent and each cited U.S. patent application publication are enclosed, but the cited U.S. patents and the cited U.S. patent application publications are listed on PTO/SB/08A and PT/SB/08B.

Respectfully submitted, DINSMORE & SHOHL LLP

By

Brian L. Smiler

Registration No. 46,458

One Dayton Centre
One South Main Street, Suite 500
Dayton, Ohio 45402-2023
Telephone: (937) 223-2050

Facsimile: (937) 223-0724

BLS/amm Encls.

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| Complete if Known | Complet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

EWENT BY APPLIC (Use as many sheets as necessary) Application Number 10/623,729
Filing Date July 21, 2003
First Named Inventor Carlo Waldfried et al.
Art Unit 1762
Examiner Name

Sheet 1 of 3 Attorney Docket Number AXC 0003 I2/01-SM5-228 CIP2

			U. S. PATENT	DOCUMENTS	-	
Examiner Initials*	Cite No. <sup>1</sup>	Document Number  Number-Kind Code <sup>2 (ff known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevan Figures Appear	
		US- 6,576,300	06/10/2003	Berry, III. et al.	1.92.00.49900	
		US- 6,558,755	05/06/2003	Berry, III. et al.		
		US- 6,558,747	05/06/2003	Nakata et al.		
· · · ·		US- 6,475,564	11/05/2002	Carter et al.		
		<sup>US-</sup> 6,383,955	05/07/2002	Matsuki et al.		
• • • •		<sup>US-</sup> 6,143,360	11/07/2000	Zhong		
		<sup>US-</sup> 6,184,260	02/06/2001	Zhong		
		<sup>US-</sup> 3,615,272	10/26/1971	Collins et al.		
		<sup>US-</sup> 4,808,653	02/28/1989	Haluska et al.		
		<sup>US-</sup> 4,999,397	03/12/1991	Weiss et al.		
		<sup>US-</sup> 5,008,320	04/16/1991	Haluska et al.		
		<sup>US-</sup> 5,010,159	04/23/1991	Bank et al.		
		<sup>US-</sup> 5,063,267	11/05/1991	Hanneman et al.		
		<sup>US-</sup> 5,210,160	05/11/1993	Saive et al.		
		<sup>US-</sup> 5,290,394	03/01/1994	Sasaki		
		<sup>US-</sup> 5,416,190	05/16/1995	Mine et al.		
	<u> </u>	US- 6,231,989 B1	05/15/2001	Chung et al.		
·		US- 6,232,424 B1	05/15/2001	Zhong et al.		
		<sup>US-</sup> 6,313,045 B1	11/06/2001	Zhong et al.		

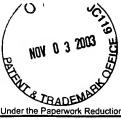
		FOREI	<b>GN PATENT DOCL</b>	JMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T <sup>6</sup>
		JP 59-178749A	10/11/1984	Fujitsu Ltd.		
·		JP 63-107122A	05/12/1988	Fujitsu Ltd.		
		JP 60-086017A	05/15/1985	Fujitsu Ltd.		
		JP 62-149308A	07/03/1987	Mitsubishi Paper Mills Ltd		
				1, , , , , ,		
		1				

Examiner	Date	
Signature	Consider	red

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substi	tute for form 1449/PT	го		Complete if Known			
				Application Number	10/623,729		
INF	ORMATIC	ON DISC	LOSURE	Filing Date	July 21, 2003		
				First Named Inventor	Carlo Waldfried et al.		
STATEMENT BY APPLICANT				Art Unit	1762		
	(Use as many	sheets as nece	ssary)	Examiner Name		-	
Sheet	2	of	3	Attorney Docket Number	AXC 0003 I2/01-SM5-228 CIP2		

			U. S. PATEN	T DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Document Number  Number-Kind Code <sup>2</sup> (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		<sup>US-</sup> 6,359,096 B1	03/19/2002	Zhong et al.	
		<sup>US-</sup> 5,618,878	04/08/1997	Syktich et al.	
		<sup>US-</sup> 5,547,703	08/20/1996	Camilletti et al.	
		<sup>US-</sup> 5,523,163	06/04/1996	Balance et al.	
		<sup>US-</sup> 5,262,201	11/16/1993	Chandra et al.	
		<sup>US-</sup> 5,116,637	05/26/1992	Baney et al.	
		<sup>US-</sup> 4,847,162	07/11/1989	Haluska et al.	
		<sup>US-</sup> 4,842,888	06/27/1989	Haluska et al.	
		<sup>US-</sup> 4,756,977	07/12/1988	Haluska et al.	
		<sup>US-</sup> 4,749,631	06/07/1988	Haluska et al.	
		<sup>US-</sup> 4,636,440	01/13/1987	lada	
		<sup>US-</sup> 6,544,858 B1	04/08/2003	Beekman et al.	
		<sup>US-</sup> 5,853,808	12/29/1998	Arkles et al.	
		<sup>US-</sup> 6,303,192 B1	10/16/2001	Annapragada et al.	
		<sup>US-</sup> 6,284,050 B1	09/04/2001	Shi et al.	
		<sup>US-</sup> 2002/0136910 A1	09/26/2002	Hacker	
		<sup>US-</sup> 5,879,744	03/09/1999	Cao et al.	
		<sup>US-</sup> 5,234,556	08/10/1993	Oishi et al.	
		<sup>US-</sup> 5,935,646	08/10/1999	Raman et al.	

		FORE	IGN PATENT DOCU	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	Τ,
<del></del>		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)			ov viciotani i iganoo vippoui	Ľ.
						H
		71				<del> </del> —
						1
	<del>                                     </del>					₩
	1		ľ			1

Examiner Signature	Date Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

	e for force 449/PTC			Compl te if Known		
	TRADE			Application Numb r	10/623,729	
INFO	PRMATIO	N DIS	CLOSURE	Filing Dat	July 21, 2003	
STATEMENT BY APPLICANT			PPLICANT	First Named Inventor	Carlo Waldfried et al.	
	(Use as many s	hoote se no	ooseand	Art Unit	1762	
	(OSE as many s	neets as ne	cessary)	Examiner Name		
Sheet	3	of	3	Attorney Docket Number	AXC 0003 I2/01-SM5-228 CIP2	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		GLASER, P.M. and PANTANO, C.G., "EFFECT OF THE H20/TEOS RATIO UPON THE PREPARATION AND NITRIDATION OF SILICA SOL/GEL FILMS" Elsevier Science Publishers B.V., Journal of Non-Crystalline Solids 63 (1994), pgs. 209-221	

	 ***	
Examiner	Date	
Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.